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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,753	07/09/2003	Marcel J.G. Janssen	99B024-5	9891
23455 7590 09/10/2007 EXXONMOBIL CHEMICAL COMPANY 5200 BAYWAY DRIVE P.O. BOX 2149 BAYTOWN, TX 77522-2149			EXAMINER BULLOCK, IN SUK C	
			ART UNIT 1764	PAPER NUMBER
			MAIL DATE 09/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/615,753

Applicant(s)

JANSSEN ET AL.

Examiner

In Suk Bullock

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-58, 60-68, 70-79, 92-128 and 130-135 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 92-127 and 130-135 is/are allowed.
- 6) ☒ Claim(s) 51-58, 60-68, 70-79, and 128 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/2/2007 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 51-58, 60-68, 70-79, and 128 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,973,792 to Lewis et al. (hereinafter "Lewis").

The Lewis reference discloses a chemical conversion process employing a catalyst comprising non-zeolitic molecular sieves such as SAPO-17 and SAPO-34. The process comprises: (a) contacting a feedstock with a fluidized mass of solid catalyst particles in a reaction zone at conditions effective to convert the feedstock into a product; and (b) contacting the particles in the reaction zone with regeneration medium at conditions effective to maintain or improve the effectiveness of the catalyst to promote the desired chemical conversion. For example, the catalyst may become less effective due to formation of carbonaceous deposits or precursors in the pores or other part of the catalyst during step (a) of the process. In step (b), the catalyst in the reaction zone is regenerated by removing carbonaceous deposit material by oxidation in an oxygen-containing atmosphere. See Abstract; col. 2, lines 20-42; and col. 18, line 67 to col. 19, line 37; and col. 21, lines 13-33. The contacting temperature is in excess of 200° C (col. 23, lines 11-26). It is particularly noted that Example 28 discloses loading a

catalyst comprising SAPO-34 into a reaction vessel and heating it to a temperature of 500° C (col. 26, lines 65-68).

Lewis fails to disclose the methanol uptake index of at least 0.15 for the SAPO catalyst.

Since the reference discloses the same SAPO catalyst as that claimed in the present invention, the SAPO catalyst of Lewis reference would inherently have the same claimed property, i.e., methanol uptake index.

It is noted that the present claimed invention is directed to loading an activated SAPO catalyst into a heated system and maintaining catalytic activity of an activated SAPO catalyst. It would have been obvious to one having ordinary skill in the art that the SAPO catalyst of Lewis is activated prior to loading it into the reactor because of the disclosure that the catalyst particles were calcined (see particularly col. 23, lines 55-56). It is deemed that the activated catalyst of Lewis is maintained at the claimed temperature of 150° C by the teaching by Lewis that the catalyst is loaded and heated to a temperature of 500° C in Example 28.

Allowable Subject Matter

Claims 92-127 and 130-135 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record does not disclose or suggest the claimed method of maintaining catalytic activity of an activated SAPO molecular sieve comprising the step of maintaining the

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molecular sieve at a temperature of at least 150° C, with no shield, and at a methanol uptake index that does not drop below 0.15 before use of said molecular sieve in a catalytic process as called for in claims 92-112. Also, the prior art of record does not disclose or suggest storing or transporting the activated SAPO molecular sieve in an anhydrous environment, and at a methanol uptake index that does not drop below 0.15 before use of said molecular sieve in a catalytic process as called for in claims 113-127. Also, the prior art of record does not disclose or suggest storing and transporting as part of a production-to-use procedure or loading into a reactor system, the SAPO molecular sieve, in its unshielded form, in a hydrous environment at a methanol uptake index that does not drop below 0.15, before use of said molecular sieve in a catalytic process as called for in claims 130-135.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to In Suk Bullock whose telephone number is 571-272-5954. The examiner can normally be reached on Monday - Friday 6:00-2:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Bullock

I.B.



Glenn Caldarola
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